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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BANGACHON, WILLIAM L	

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/864,807	MAYS ET AL.	
	Examiner	Art Unit	
	William Bangachon	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 May 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/12/2005 have been fully considered but they are not persuasive.

In response to applicant's argument [page 9, 3rd paragraph] that **"there is no suggestion to combine the references"**, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Heredia is concerned with programming transponder chips from various manufacturers who use different protocols for reading and writing and proposes to configure the printer to drive the transponder chip having a protocol selected from several different protocols. Heredia teaches, **"the protocol used for driving (interrogating or programming) said transponder chip is selected from a plurality of different protocols"** {Heredia, col. 8, lines 33-35} **but is silent with the use of two communication interface/two antennas for switching between different protocols.** Wood Jr. is relied upon to teach of an interrogator (tag programmer) having a plurality of antennas (i.e. first, second, third antenna shown by Wood Jr. in Figure 1; col. 11, lines 24-30) employing differing RF communication protocols (Wood Jr., col. 8,

lines 50+; col. 10, lines 22+). Wood Jr. suggests that said features are beneficial for ensuring successful communication with any transponder communicating at different frequencies and data protocol (see Wood Jr., Summary of the Invention). On the other hand, Heredia et al is also concerned with reading and writing transponder chips in a quick and easy manner {Heredia, col. 1, lines 22-25}. Obviously, establishing successful communication with any transponder that employs differing RF communication protocols is an essential step in reading and writing transponder chips in a quick and easy manner, at the same time ensuring that all transponder chips are read and written correctly. Therefore, it would have been obvious to one of ordinary skill in the art to have multiple antennas (as claimed) in the system of Heredia (as taught by Wood) to ensure successful communication with any transponder that employs differing RF communication protocol and thereby speed-up the reading and writing of transponder chips and ensuring that all transponder chips are read and written correctly.

Further, the court held that mere duplication of parts (i.e. duplication of the antenna of Heredia) has no patentable significance unless a new and unexpected result is produced (see In re Harza).

B. Duplication of Parts

In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).

In response to applicant's argument that **"the system of Wood is nonanalogous art"**, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the systems of Heredia and Wood are in the same field of endeavor, transponder systems. Heredia teaches, **"the protocol used for driving (interrogating or programming) said transponder chip is selected from a plurality of different protocols"** {Heredia, col. 8, lines 33-35}. However, Heredia discloses only one antenna when switching between the different protocols. Wood, in the same field of endeavor, teaches of using multiple antennas to program transponders.

In response to applicant's argument that **"the Examiner's conclusion of obviousness is based upon improper hindsight reasoning"**, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Finally, the claims are broader than what applicant argues. The Examiner respectfully traverses applicant's arguments that **"Heredia does not disclose automatically detecting a first and second RF communication protocol"** [page 10].

In this case, Heredia is concerned with programming transponder chips from various manufacturers who use different protocols for reading and writing and proposes to configure the printer to drive the transponder chip having a protocol selected from several different protocols. As taught by Heredia, **"the protocol used for driving said transponder chip is selected from a plurality of different protocols"** {Heredia, col. 8, lines 33-35}. Obviously, whenever data is to be written in said various transponders from different manufacturers that uses different protocols, the system of Heredia would select the protocol of that manufacturer, which is easy to implement by suitable programming of the microprocessor {Heredia, col. 5, lines 36-38+}. Further, the court held that automating a manual activity, which accomplishes the same result, is not sufficient to distinguish over the prior art. See In re Venner.

III. AUTOMATING A MANUAL ACTIVITY
In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined "old permanent-mold structures together with a timer and solenoid which automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed." The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.).

2. Applicant's arguments with respect to claims 27-47 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

3. It is noted that there is no PTO 1449 submitted with this application.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **"device for switching the programmer"** recited in claim 1; **"device for switching between differing RF protocols"** recited in claim 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the Examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 27 and 34 recites an **"automatic switching mechanism"** for switching the programmer to different protocols automatically, that is not disclosed in the specification.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 27-47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In this case, it is unclear in the specification and the drawings how the programmer automatically switches from one protocol to the other. There is no indication of an automatic switching mechanism in the drawings or specification.

8. Claims 27-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in the claims on how the programmer determines whether it is using the right protocol to communicate (program) with the tag to thereby make the automatic switch.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 27-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,327,972 (Heredia et al) in view of USP 5,842,118 (Wood Jr.).

In claims 34, 42 and 44-45, Heredia et al teach of an integrated printer and a device for programming transponder chips (intelligent label programmer) comprising:

a print engine (Fig. 1) operable to print on sets of transponder chips (intelligent labels) from various manufacturers, the transponder chips being characterized by several differing RF protocols {col. 3, lines 17-23}.

Clearly, the control unit 19 is a multi-protocol RF tag programmer functionally associated with the print engine {paragraph bridging cols. 4 and 5}. The control unit 19 (multi-protocol RF tag programmer) being operable to read/write data or program the sets of transponder chips (intelligent labels) from various manufacturers who use several different protocols {col. 3, lines 17-21}.

Heredia teaches "programming sets of transponder chips (intelligent labels) from various manufacturers, the transponder chips being characterized by several differing RF protocols {col. 3, lines 17-23}, wherein "the protocol used for driving (interrogating or programming) said transponder chip is selected from a plurality of different protocols

{col. 8, lines 33-35}". Although Heredia discloses only one antenna when switching between the different protocols, it would have been obvious to one of ordinary skill in the art to have multiple antennas for programming the transponder chips from various manufacturers, as evidenced by Wood. Wood Jr., in the same field of endeavor (transponder systems), is relied upon to teach of an interrogator (tag programmer) having a plurality of antennas/programming interface (i.e. first, second, third antenna shown by Wood Jr. in Figure 1; col. 11, lines 24-30) employing differing RF communication protocols (Wood Jr., col. 8, lines 50+; col. 10, lines 22+). Wood Jr. suggests that said features are beneficial for ensuring successful communication with any transponder communicating at different frequencies and data protocol (see Wood Jr., Summary of the Invention). On the other hand, Heredia et al is also concerned with reading and writing transponder chips in a quick and easy manner {Heredia, col. 1, lines 22-25} and concerned with the placement of antenna (20) to ensure a successful communication with a single or group of tags {Heredia, col. 4, lines 60+}. Obviously, establishing successful communication with any transponder that employs differing RF communication protocols is an essential step in reading and writing transponder chips in a quick and easy manner, at the same time ensuring that all transponder chips are read and written correctly, to one of ordinary skill in the art. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to have multiple antennas (as claimed) in the system of Heredia (as taught by Wood) to ensure successful communication with any transponder that employs differing RF

communication protocol to thereby speed-up the reading and writing of transponder chips and ensure that all transponder chips are read and written correctly.

With regards to the use of two communication interfaces (two antennas) instead of a single interface/antenna, the court held that mere duplication of parts (i.e. two antennas instead of a single antenna to switch between different protocols) has no patentable significance unless a new and unexpected result is produced (see In re Harza).

Finally, with regards to **making a manual activity automatic**, the court broadly held that automating a manual activity, which accomplishes the same result, is not sufficient to distinguish over the prior art (see In re Venner).

In claims 35 and 36, the print engine and multi-protocol RF tag programmer are operatively coupled to a common computer interface and are operable to respond to programming commands received through the common computer interface {paragraph bridging cols. 4 and 5}.

In claims 37 and 39, clearly, the print engine and multi-protocol RF tag programmer are supported within a common housing because the print engine and RF tag programmer of Heredia are integrated as one unit {col. 1, lines 31+}.

In claim 38, the housing includes further provision for supporting at least one supply of intelligent labels {paragraph bridging cols 3 and 4}.

In claims 40-41, the print engine is a thermal print engine {col. 3, lines 59-63}.

In claim 43, the multi-protocol RF tag programmer further comprises:

a first RF tag programmer operable to communicate with an intelligent label set as the intelligent labels in the set pass through a first communication field; and

an RFID module coupled to the first RF tag programmer through an interface, the RFID module operable to communicate with an intelligent label set as the intelligent labels in the set pass through a second communication field {col. 5, lines 40+}.

In claims 46-47, the RFID module is configured to be installable as an option / accessory {col. 1, lines 30+}.

Claims 27-33 and 55-58 recites a method for practicing the combined printer and tag programmer of Heredia, recited in claims 34-47, and therefore rejected for the same reasons.

With regards to claims 48-54, the claims recite the tag programmer of claims 34-47 and therefore rejected for the same reasons.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USP 6,889,476, USP 6,593,853, USP 6,246,326, USP 6,409,401, USP 6,123,796, USP 6,019,865 are cited in that these patents teach of RFID tag and label printer.

Office Contact Information

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William Bangachon whose telephone number is **(571)-272-3065**. The Examiner can normally be reached on 4/4/1010.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Horabik can be reached on **(571)-272-3068**. The fax phone numbers for the organization where this application or proceeding is assigned is **5(571) 273-830000** for regular and After Final formal communications. The Examiner's fax number is **(571)-273-3065** for informal communications.

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6071.

William Bangachon
Examiner
Art Unit 2635

February 16, 2006

MICHAEL HORABIK
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